

The Ramtop

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**Cruising with Online Services
Report on the Psion 3a
Zen and the Internet Part 2**

Connecting with On Line Services and Internet Access.

Today the primary on line services are CompuServe, America on Line, Prodigy, Genie and Delphi. Together their subscribers number 5 to 6 million. These commercial services offer things like stock quotes, news, databases, on line shopping, E-mail and various professional interests and hobby support groups. Some of the services are more oriented to business users while others seem aimed at individuals or the novice user. They all have fairly easy access and may have their own network telephone lines and proprietary software to use for their system. They will try to make sure there are no unwanted surprises in the form of hidden viruses or pranks. The Internet on the other hand has an estimated 20 to 30 million users, many at universities, in business or government. It has no centralized management and no universal standards although some have evolved. It evolved from computer links between government, business and educational computer systems usually on not so friendly UNIX systems. In our on going article about the internet you will notice more than a few unix style commands.

All of the commercial services provide Internet E-mail access. Some charge to send or receive a message from the Net others do not. While the relationship and conceptual view of Internet for each company is different, you can find out that all of them provide a fee based service on a managed system as opposed to an unregulated service without charges once accessed. However you may have to pay for a full access doorway to the net to get many or all of the features. Freenet, for example, here in Cleveland has no access charge and offers usenet, telenet and other parts of the Internet but not others like WWW or Gopher.

The Internet, as you may know, is termed the "Information superhighway" by a well know politician is also called the "Data Driveway" by a not so well known computer pundit on the radio, and that essentially defines what the network is. It is a mammoth collection of various systems strung together. Some are useful others are not depending

what information you need. However it does have much of information that is being provided on the commercial services if you can find it without too much difficulty. This is where the real attraction for the Internet has come in with the development of browsers, programs that help the individual around the Net and in particular with the development of The World Wide Web (WWW) which is one system of the Internet that is the most attractive to many today. It is a hypertext format containing both graphics and linked text. To use it fully requires special graphical interface software like Mosaic to see everything. There are other systems, Bitnet, Telnet, Usenet etc., which are part of the Internet and do not use graphics.

Now a little more about the commercial services and Internet. Some of the services will permit you to use standard telecommunications software packages like Telix or Procom to access them., these systems probably can be run from the command line by Sinclairs, QLs and Z-88's. Others require that you use a proprietary software package, which usually exist only for PC or MAC platforms. The advantage of these is that graphics and other features of the particular service can be written into the software. Prodigy and AOL both fall into this later group. CIS also has a graphical interface but it is not needed to access the service. The commercial services provide some of the same information that can be found on the net. However everything on a commercial service is usually easier to use and find. Remember, they are commercial products designed to attract people to using them. The easier they are to use the better their profit lines are. Graphics oriented programs have made these services more accessible even to technophobes. They now have expanded and made access to the internet much easier.

Here is a brief description of each of the services and what they provide. They should be considered as gateways. Their current pricing structure may or may not be a cost effective way to access the Net for you. They may have services that will be beneficial to you, like an E-Mail address or a local telephone number. There are many things beside these to factor in your decision. Consider that the software they provide or sell is usually written one person or one group of people and while it may seem good for the programmers it may not be so useful or good for you. Additionally each

service with proprietary software, either now or in the future may or may not support every platform.

Delphi begun in 1981 was the first of the above commercial providers to connect to Internet . It provides good access to the Net. It does access WWW although without the graphics. There is one benefit to this in a gain in speed. Delphi has a lot to offer but the user will have to find out if they like the way the system is set up. Contact Delphi at 1-800-695-4005 or E-mail Info@delphi.com.

Genie has promised an on-line connection to the Net and is currently running beta tests on the software that they will be using. It should be coming out in the next few months. It will provide Internet access to the many sites including the WWW but like Delphi it will not support graphics. Contact Genie at 1-800-638-9636

Prodigy added full WWW capabilities earlier this year and took the system from a poky advertising medium for novices to the forefront of pack. It has a good graphical interface for its users. Problems with transmission speed and getting to the Internet are not rarely unheard of. However it is testing a service on fiber optic cable on the west coast. Prodigy is currently the favorite of PC Computing. Check out Prodigy at your nearby Sears store or call them at 1-800-Prodigy ext. 473, email them at free trial@prodigy.com or download their software from their web site, www.astranet.com.

America On Line which has more than doubled in size over the past year has had Internet capability for some time now but a little less access to the Net then Delphi. It has an easier to use program interface and they are working to bring out software soon that will support the full graphic capabilities of the Web. AOL has a lot of fans because their software is fairly easy to use and now has full WWW service. Some prefer AOL's browser to Spry's mosaic and have had fewer problems with it. AOL's detractors have established their own Internet site (AOL Sucks) and complain about problems with crowded telephone lines and relatively slow transmission speed which are some of the same problems that Prodigy has, as well as a problem with censorship. Contact AOL at

1-800-827-6364 and E-mail aohotline@aol.com

Compuserve is the dominant commercial provider had been moving coolly toward the Internet compared to the other services until recently. Earlier this year they added some Internet pages and an Internet forum in addition to access to Usenet. A most dramatic change is their recent acquisition of Spry. A company that makes several of the better Internet software tools, programs like Mosaic in a Box , Internet in a Box and Internet Office. Under Compuserve they are linked to compuserve's account structure and offer a PPP gateway to the net, which allows you to use not only Spry's but other software should you choose through their account.. Contact Compuserve at 1-800-848-8990.

Other straight Internet services exist and may offer an attractive alternative to the main on-line services. Netcom and the OS/2 Warp service come to mind. In the wings is Microsoft, which is playing a high stakes game with their upcoming 32 bit version of Windows previously called code named Chicago, now Windows 95. They have purchaed part of the uunet network and may launch their own service with software to be bundled with either Windows 95 or as part of Microsoft Office.

All of the services have programs where you can try the system out for a limited time . Just call the numbers or ask. The commercial services are probably the best way for you to get your feet wet in telecommunications. All are planning for a future of greater interconnectivity, and interactivity. Some are looking toward running their services through cable tv fiber optic hookups rather than slower telephone lines. All are working to solve basic Internet problems like security. The Internet is the first step toward the interactive, information future, of course you must determine if has the sort of information you need.

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Zen and the Art of the Internet

A Beginner's Guide to the Internet

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Chapter 2: Electronic Mail

The desire to communicate is the essence of networking. People have always wanted to correspond with each other in the fastest way possible, short of normal conversation. Electronic mail (or email) is the most prevalent application of this in computer networking. It allows people to write back and forth without having to spend much time worrying about how the message actually gets delivered. As technology grows closer and closer to being a common part of daily life, the need to understand the many ways it can be utilized and how it works, at least to some level, is vital.

2.1 Email Addresses

Electronic mail is hinged around the concept of an address; the section on Networking Basics made some reference to it while introducing domains. Your email address provides all of the information required to get a message to you from anywhere in the world. An address doesn't necessarily have to go to a human being. It could be an archive server, a list of people, or even someone's pocket pager. These cases are the exception to the norm; mail to most addresses is read by human beings.

2.1.1 %@!.: Symbolic Cacophony

Email addresses usually appear in one of two forms: using the Internet format which contains '@', an "at"-sign, or using the UUCP format which contains '!', an exclamation point, also called a "bang." The latter of the two, UUCP "bang" paths, is more restrictive, yet more clearly dictates how the mail will

travel.

To reach Jim Morrison on the system south.america.org, one would address the mail as 'jm@south.america.org'. But if Jim's account was on a UUCP site named brazil, then his address would be 'brazil!jm'. If it's possible (and one exists), try to use the Internet form of an address; bang paths can fail if an intermediate site in the path happens to be down. There is a growing trend for UUCP sites to register Internet domain names, to help alleviate the problem of path failures.

Another symbol that enters the fray is '%' it acts as an extra "routing" method. For example, if the UUCP site dream is connected to south.america.org, but doesn't have an Internet domain name of its own, a user debbie on dream can be reached by writing to the address: debbie%dream@south.america.org

The form is significant. This address says that the local system should first send the mail to south.america.org. There the address debbie%dream will turn into debbie@dream, which will hopefully be a valid address. Then south.america.org will handle getting the mail to the host dream, where it will be delivered locally to debbie.

All of the intricacies of email addressing methods are fully covered in the book !%@.: A Directory of Electronic Mail Addressing and Networks published by O'Reilly and Associates, as part of their Nutshell Handbook series. It is a must for any active email user. Write to nuts@ora.com for ordering information.

2.1.2 Sending and Receiving Mail

We'll make one quick diversion from being OS-neuter here, to show you what it will look like to send and receive a mail message on a Unix system. Check with your system administrator for specific instructions related to mail at your site.

A person sending the author mail would probably do something like this:

% mail brendan@cs.widener.edu Subject: print job's stuck

I typed 'print babe.gif' and it didn't work! Why?? The next time the author checked his mail, he would see it listed in his mailbox as:

```
% mail "/usr/spool/mail/brendan": 1 messages 1 new 1
unread U 1 joeuser@foo.widene Tue May 5 20:36
29/956 print job's stuck ?
```

which gives information on the sender of the email, when it was sent, and the subject of the message. He would probably use the 'reply' command of Unix mail to send this response:

```
? r To: joeuser@foo.widener.edu
Subject: Re: print job's stuck
You shouldn't print binary files like GIFs to a printer!
Brendan
```

Try sending yourself mail a few times, to get used to your system's mailer. It'll save a lot of wasted aspirin for both you and your system administrator.

2.1.3 Anatomy of a Mail Header

An electronic mail message has a specific structure to it that's common across every type of computer system. The standard is written down in RFC-822. See [RFCs] for more info on how to get copies of the various RFCs. A sample would be:

From bush@hq.mil Sat May 25 17:06:01 1991

Received: from hq.mil by house.gov with SMTP id AA21901 (4.1/SMI for dan@house.gov); Sat, 25 May 91 17:05:56 -0400

Date: Sat, 25 May 91 17:05:56 -0400
From: The President <bush@hq.mil>
Message-Id:<9105252105.AA06631@hq.mil>
To: dan@senate.gov
Subject: Meeting

Hi Dan .. we have a meeting at 9:30 a.m. with the Joint Chiefs. Please don't oversleep this time.

The first line, with 'From' and the two lines for

'Received:' are usually not very interesting. They give the "real" address that the mail is coming from (as opposed to the address you should reply to, which may look much different), and what places the mail went through to get to you. Over the Internet, there is always at least one 'Received:' header and usually no more than four or five. When a message is sent using UUCP, one 'Received:' header is added for each system that the mail passes through. This can often result in more than a dozen 'Received:' headers. While they help with dissecting problems in mail delivery, odds are the average user will never want to see them. Most mail programs will filter out this kind of "cruft" in a header.

The 'Date:' header contains the date and time the message was sent. Likewise, the "good" address (as opposed to "real" address) is laid out in the 'From:' header. Sometimes it won't include the full name of the person (in this case 'The President'), and may look different, but it should always contain an email address of some form.

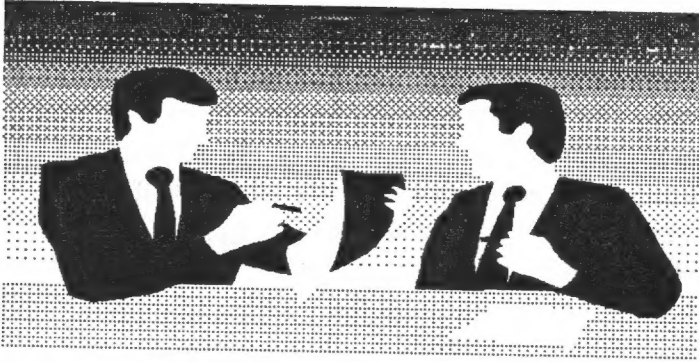
The 'Message-ID:' of a message is intended mainly for tracing mail routing, and is rarely of interest to normal users. Every 'Message-ID:' is guaranteed to be unique.

'To:' lists the email address (or addresses) of the recipients of the message. There may be a 'Cc:' header, listing additional addresses. Finally, a brief subject for the message goes in the 'Subject:' header.

The exact order of a message's headers may vary from system to system, but it will always include these fundamental headers that are vital to proper delivery.

```
From: Mail Delivery Subsystem
<MAILER-DAEMON>
Date: Sat, 25 May 91 16:45:14 -0400
To: mg@gracie.com
Cc: Postmaster@cs.widener.edu
Subject: Returned mail: User unknown
```

Areas of interest are wide and varied. ETHICS-L deals with ethics in computing, while ADND-L has to do with a role-playing game. A full list of the available BITNET lists can be obtained by writing to 'LISTSERV@BITNIC.BITNET' with a body containing the command



----- Transcript of session follows -----

While talking to cs.widener.edu: >>>

RCPT To:<lsimpson@cs.widener.edu> <<<

550 <lsimpson@cs.widener.edu>...

User unknown 550 lsimpson... User unknown

2.1.4 Bounced Mail

When an email address is incorrect in some way (the system's name is wrong, the domain doesn't exist, whatever), the mail system will bounce the message back to the sender, much the same way that the Postal Service does when you send a letter to a bad street address. The message will include the reason for the bounce; a common error is addressing mail to an account name that doesn't exist. For example, writing to Lisa Simpson at Widener University's Computer Science department will fail, because she doesn't have an account (Though if she asked, we'd certainly give her one.)

As you can see, a carbon copy of the message (the 'Cc:' header entry) was sent to the postmaster of Widener's CS department. The Postmaster is responsible for maintaining a reliable mail system on his system. Usually postmasters at sites will attempt to aid you in getting your mail where it's supposed to go. If a typing error was made, then try re-sending the message. If you're sure that the address is correct, contact the postmaster of the site directly and ask him how to properly address it.

2.2.1 Listservs

On BITNET there's an automated system for maintaining discussion lists called the listserv. Rather than have an already harried and overworked human take care of additions and removals from a list, a program performs these and other tasks by responding to a set of user-driven commands.

The message also includes the text of the mail, so you don't have to re-type everything you wrote.

----- Unsent message follows -----

Received: by cs.widener.edu id AA06528; Sat, 25 May 91 16:45:14 -0400

Date: Sat, 25 May 91 16:45:14 -0400

From: Matt Groening <mg@gracie.com>

Message-Id: <9105252045.AA06528@gracie.com>

To: lsimpson@cs.widener.edu

Subject: Scripting your future episodes

Reply-To: writing-group@gracie.com

:::verbiage:::

The full text of the message is returned intact, including any headers that were added. This can be cut out with an editor and fed right back into the mail system with a proper address, making re-delivery a relatively painless process.

2.2 Mailing Lists

People that share common interests are inclined to discuss their hobby or interest at every available opportunity. One modern way to aid in this exchange of information is by using a mailing list usually an email address that redistributes all mail sent to it back out to a list of addresses. For example, the Sun Managers mailing list (of interest to people that administer computers manufactured by Sun) has the address 'sun-managers@eecs.nwu.edu'.

Any mail sent to that address will "explode" out to each person named in a file maintained on a computer at Northwestern University.

Administrative tasks (sometimes referred to as administrivia) are often handled through other addresses,

When in doubt, try to write to the '-request' version of a mailing list address first; the other people on the list aren't interested in your desire to be added or deleted, and can certainly do nothing to expedite your request. Often if the administrator of a list is busy (remember,

this is all peripheral to real jobs and real work), many

Exercise caution when replying to a message sent by a mailing list. If you wish to respond to the author only, make sure that the only address you're replying to is that person, and not the entire list. Often messages of the sort "Yes, I agree with you completely!" will appear on a list, boring the daylights out of the other readers. Likewise, if you explicitly do want to send the message to the whole list, you'll save yourself some time by checking to make sure it's indeed headed to the whole list and not a single person.

A list of the currently available mailing lists is available in at least two places; the first is in a file on `ftp.nisc.sri.com` called 'interest-groups' under the 'netinfo/' directory. It's updated fairly regularly, but is large (presently around 700K), so only get it every once in a while. The other list is maintained by Gene list global

However, be sparing in your use of this, see if it's already on your system somewhere. The reply is quite large.

The most fundamental command is 'subscribe'. It will tell the listserv to add the sender to a specific list. The usage is:

```
subscribe fool Your Real Name
```

It will respond with a message either saying that you've been added to the list, or that the request has been passed on to the system on which the list is actually maintained.

The mate to 'subscribe' is, naturally, 'unsubscribe'. It will remove a given address from a BITNET list. It, along with all other listserv commands, can be abbreviated 'subscribe' as 'sub', 'unsubscribe' as 'unsub', etc. For a full list of the available listserv commands, write to `LISTSERV@BITNIC.BITNET` giving it the command 'help'.

As an aside, there have been implementations of the listserv system for non-BITNET hosts (more specifically, Unix systems). One of the most complete is available on `cs.bu.edu` in the directory 'pub/listserv'.

"I made this letter longer than usual because I lack the time to make it shorter."

Pascal, Provincial Letters XVI



A Look at the Psion 3a

by Jon Kaczor

Late last year I purchased a Psion Series 3a computer or PDA as they are known. I suspect that PDA stands for Personal Data Assistant. It is much more than a "souped up" organizer. It is in fact a palmtop computer. Previous to purchasing the Psion I had read a number of articles and ads detailing its features. I was mildly interested until I wandered into a Sharper Image Store and actually saw and HEARD the Psion. I had to have one. The best deal locally was at Best Buys where I got an additional 10% off because the display case was locked and no one had a key. I had to come back the next day but, hey, it was 10% off.

What I have come to discover is that the Psion 3a is a technological marvel. Weighing in at just under 9 oz with batteries it is truly portable. I carry it with me most of the time in my jacket pocket. It's great for banging out letters in waiting rooms or anywhere. Right now I am typing this article while waiting for the doctor to show up for my eye exam. You can become more productive by taking advantage of little niches in the day. I've written a couple of letters while I've sat in waiting rooms and elsewhere and printed them out when I got back to work or home.

The Specs on the Psion are as follows:

Microprocessor - a 16 bit NEC V30H (80C86 compatible) running at 7.68 MHz.

Screen - 80 characters by 25 lines in ZOOM mode; 480x160 resolution CGA graphic. The LCD is 5" x 1.75". Contrast is adjusted by holding down the "psion" key while pressing either the "<" or ">" key.

Size - 6.5" x 3.3" x 0.9" in a well designed clamshell style case which raises the angle of the keyboard toward the operator while keeping the screen at a slight incline.

Keyboard - The keyboard is of the chicklet variety, qwerty style, with an audible click which will accommodate a pseudo touch typing. There are 8 additional touch-sensitive buttons for application selection. The key board is definitely superior to that on the HP 200LX.

Power - runs for months on two AA alkaline batteries. Adequate power monitoring features are built in. A 3 volt lithium cell backs up the main batteries. There is an AC adapter available as well.

Ports - the Psion talks to the outside world through its single serial port. There are a number of options including a modem, parallel printer cable and PC/Mac connectivity kit which connect to the serial port.

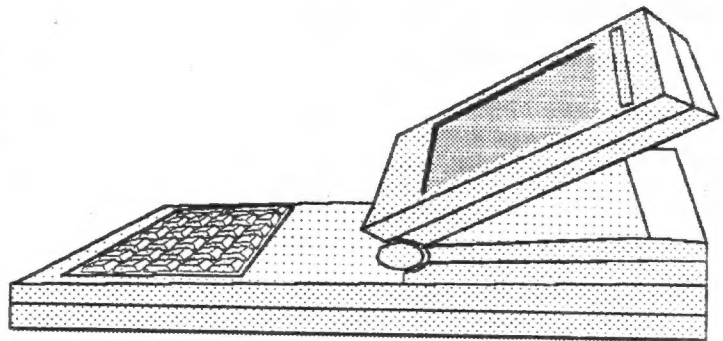
Sound - A new feature with the 3a is a voice note pad for recording short messages. The system includes a built in loudspeaker and microphone for recording. Approximately 8k of memory is used for each second of the recording.

Storage - The series 3 uses memory for an internal disk. There are also bays to accommodate two SSD (Solid State Disks). The SSD's are available in two flavors, Flash and Ram, in sizes from 128k to 4 meg. Generally, programs for the Psion are more compact than their PC counterparts and quite a few can be saved to a 1 meg SSD. If you have a connectivity pack, files can be save and backed up to a floppy or hard drive on the linked PC or Mac.

Programs - The Psion come loaded with a suite of programs built into ROM. The programs include a data base initially configured as an address book, a Microsoft Word compatible word processor, a rather sophisticated Agenda, a Lotus 123 compatible spread sheet, a Calculator and a World Time component. There is an optional spell checker thesaurus (which is included in ROM in the newest models).

Programming - the user can program in 2 language with the computer as it comes out of the box: OPL and machine code. OPL (Organizer Programming Language) is a procedure-based, BASIC like language with graphics windows, menu and file handling controls, featuring over 200 commands and functions. There is a small C compiler available as shareware.

The Psion uses MS-DOS file format, so files can be written to and from DOS computers, but it will not run DOS programs. Data files such as spreadsheet, agenda, word processing and data base files (as delimited ASCII) can be exchange with PC programs. There are numerous commercial applications available for the Psion and there is a large base of public domain and shareware programs available.



Two new models of the 3a have been released, a version with 2 meg of RAM and built in Spell Checker Thesaurus for \$595 and a 1 meg version for \$495. The price on the 512k Psion is \$379 from NewWorld Technologies, Inc. of New York.

To sum up my experience with the Psion, I can say that the machine can be quirky and aggravating at times but this is the most fun I've had with a computer since I opened the box on my first TS1000 and spent the first of many sleepless nights hunched over the little membrane keyboard.

Obituary: Thomas Jennens

Tom Jennens died March 6th after a long illness and was buried March 9, 1995 in Willowick, Ohio. Tom was a long time active member of the GC T/SUG (Greater Cleveland Timex Sinclair Users Group). In the mid 1980's he helped many members find 2068s and other Timex and Sinclair peripherals to buy, some from sources as far away as Louisiana. He also handled the sale and distribution of program tapes for the TS/1000 and the TS/2068 for many years. He participated in many shows including the Euclid Square Multi-Group User Show and the National Sinclair User Group Show in 1989 which was held at the Beck Center in Lakewood.

He wrote several original programs for his own use on the TS/2068 during his time with our group. Tom last made an appearance at the annual Christmas meeting in December. He will be missed by all of us.



QL to use CD ROMs

by Dennis Donahue via QBOX

GOOD news! There now is a way for you to read a CDROM on a QXL . I have already read two different disks with my QXL. I recently purchased a CDROM recorder and produced my own disk which I can read like any hard drive. It is read as win5_ (my cdrom is drive G: in dos) and I backed every QL file I could find (about 50 meg mostly in zip format). The first disk was read on May 27 so I think I have completed the first successful test. On the disk also is a backup of my entire hard drives (about 480 meg). I have a question. Does anyone know of any way to change the name of the qxl_win to something else then change a variable and still read it? Some thing like QXL2_WIN? to have several QXL_WIN on one disk?

R a m t o p

Ramtop is the publication of the Greater Cleveland Timex Sinclair User Group and is published quarterly. Contributions are welcome and other User Groups are free to reprint information presented here with proper attribution.

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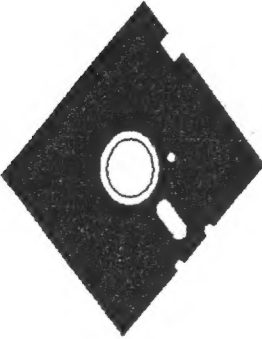
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